



# How to make a Tippy Tap

A hygienic hand washing device with running water

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## Introduction

This document describes how to make a Tippy Tap, a simple handwashing device with running water.

The Tippy Tap consists of a 5 liter container hanging on a horizontal stick. The container can be tipped by pulling a rope through the cap. The rope is attached to a stick lying on the ground, which is pushed down by foot.

As only the soap is touched during hand washing, the device is very hygienic.



## Materials needed

1. Two wooden branches of 2 meter length, with Y-shaped end.
2. Two thinner sticks of ~1 meter length.
3. A saw to cut the wood.
4. A nail
5. A pair of pliers
6. A lighter
7. A shovel
8. Two lengths of rope (0.5 m and 1 m)
9. A 5 liter container
10. A piece of soap
11. A screwdriver
12. A bag of gravel



## Cutting the wood

Cut two branches of wood of ~2 meter length, which have a Y-shape at the end.

Cut two thinner branches, each of ~1 meter length.

Attache a piece of string of ~1 meter length to one of the sticks.



### **Making the hole**

Mark the location for the hole on the container, around 12 cm below the cap



### **Heating the nail**

Hold the nail with a pair of pliers, and heat the nail with a lighter.



### **Making the holes**

With the hot nail, make the hole in the container, and a second hole in the cap



### **Inserting the rope**

Put the rope, which is attached to the stick, through the hole in the cap.



### **Knotting the rope**

Make a knot in the rope which cannot pass through the hole.



### **Putting it together**

Screw the cap back on the container. The stick is now connected to the container with the rope.



### **Making the hole through the soap**

Using a screwdriver, make a hole through the soap by slowly rotating and pushing the screwdriver through the soap



### **Inserting the rope**

Put the second piece of rope through the hole in the soap, and tie a piece of wood to it.



### **Filling the container**

Fill the container with water, up to the level of the hole.



### **Putting the poles in the ground**

Using a shovel, put the poles in the ground to a depth of 50cm. The distance should be about 70 cm.



### **Hanging up the container**

Put the stick through the handle of the container, and put the stick between the poles.

Adjust the length of the rope such that the end of the stick is about 15cm above the ground



### **Adding the soap**

Tie the rope with the soap to the stick.



### Gravel soakaway

Between the two poles, below the container, dig a hole of 40 x 40 cm, and 10 cm deep. Fill the hole with gravel.

The water soaks away in the hole, and prevents a mudhole from forming. The gravel also keeps mosquitos from breeding.



### Using the Tippy Tap

Push the stick down with your foot. This tips the container, which makes water run out of the hole. (in the photo, the gravel soakaway is missing)

Wet your hands and release the stick. Apply soap to your hands. Push the stick down again and clean your hands.



This information can also be found on

[www.wot.utwente.nl](http://www.wot.utwente.nl)

[www.connectinternational.nl](http://www.connectinternational.nl)

[www.akvo.org](http://www.akvo.org)